

ABSTRACT

CERIUM AND/OR LANTHANUM PHOSPHATE SOL, A PROCESS FOR ITS
PREPARATION AND USE FOR POLISHING

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The invention concerns a cerium and/or lanthanum phosphate sol, a process for its preparation and its use in polishing.

The sol of the invention comprises an aqueous phase; particles of a phosphate of at least one rare earth selected from cerium and lanthanum; and an acid other than phosphoric acid the cerium and lanthanum salts of which are soluble in water.

The process for preparing this sol consists of continuously introducing a first solution of salts of at least one of said rare earths into a second solution of phosphate ions with an initial pH of less than 2; of controlling the pH of the precipitation medium during precipitation at a constant value of less than 2; of separating the precipitate from the reaction medium and of taking up the dispersion in water then adding to the dispersion obtained at least one said rare earth salt and said acid in a quantity such that the final PO_4^{3-} /rare earth mole ratio in the dispersion is 1.